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TITLE:

PRESSURE SWING METHOD FOR SEPARATING

AND RECOVERING

VOLATILE ORGANIC MATTER

PUBN-DATE:

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INVENTOR-INFORMATION: NAME IZUMI, JUN MORIMOTO, TAKASHI TSUTAYA, HIROYUKI OSHIMA, KAZUAKI ARAKI, KOICHI TAKEDA, KAZUMI

ASSIGNEE-INFORMATION:

NAME

MITSUBISHI HEAVY IND LTD

COUNTRY

N/A

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## ABSTRACT:

PURPOSE: To efficiently separate and recover volatile org. matter by passing a gas contg. volatile org. matter through an adsorbent under specified pressure to adsorb the org. matter and desorbing the adsorbed org. matter under the reduced pressure of ≤ 1/10 of the adsorption pressure.

CONSTITUTION: The gas contg. volatile org. matter such as halogenated org.
matter, e.g., fluorocarbons and trichloroethane, is passed down through the adsorbent bed of γ -alumina, activated carbon, high-silica zeolite, silica fine particles, silica gel, etc. under the adsorption pressure 1 - 2 atm, to adsorb the volatile org. matter in the adsorbent. The adsorbed volatile org.
matter is then desorbed under the reduced pressure of ≤ 1/10 of the adsorption pressure, and the volatile matter is contracted, concentrated and recovered. The contracted and concentrated volatile

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compressed, liquefied and concentrated.

gaseous org. matter is